

# **CENSUS OF FATAL OCCUPATIONAL INJURIES**

## **New Jersey – 1999**

NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES

IN COOPERATION WITH THE  
U.S. DEPARTMENT OF LABOR  
BUREAU OF LABOR STATISTICS

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### **Census of Fatal Occupational Injuries Project**

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**This document is available on the Internet at:**  
**[www.state.nj.us/health/eoh/odisweb](http://www.state.nj.us/health/eoh/odisweb)**

## **FOREWARD**

The Census of Fatal Occupational Injuries (CFOI) Project is a cooperative effort between the federal government and state governments. It was initiated in 1990 by the U.S. Department of Labor, Bureau of Labor Statistics (BLS). Data is collected from 50 states and U.S. territories. The impetus for the CFOI project was the lack of a true count of occupational injury fatalities. Estimates of the number of fatal injuries varied widely due to different reporting sources and definitions. CFOI's objective is to collect detailed information on every occupational injury fatality in a timely manner. The national data file is available to researchers from the Bureau of Labor Statistics.


The BLS provides funding to the states that is matched by the states. The states actively collect, verify, code, computerize, and transmit to BLS detailed information on work-related fatal injuries. Coding is done according to the BLS protocol. Identifying information such as workers' names, employers' names, and company names are not sent to BLS. In New Jersey, the CFOI project is conducted by the Occupational Health Service within the New Jersey Department of Health and Senior Services.

In this publication, totals of some categories may not be the same as those published by the BLS for New Jersey. Differences may be due to grouping of information.

The Internet address for the Bureau of Labor Statistics, Census of Fatal Occupational Injuries, is: [www.bls.gov/oshfat1.htm](http://www.bls.gov/oshfat1.htm).

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- Total number of fatal injuries: 103
  - There were four incidents in which two or more workers were killed.
  - 2.56 fatal injuries per 100,000 workers
  - 97 were men and 6 were women
  - 23% were foreign-born workers
  - 85% were residents of New Jersey
  - age at death ranged from 16 to 78, average age was 45, 51% were younger than 45 years of age
  - 97 worked for wages or salary, 6 were self-employed
  - 95 worked in the private sector, 8 were public employees
  - The highest number of fatal injuries occurred in the industries of construction (26) and transportation and public utilities (20).
  - The highest number of fatal injuries occurred in the occupations of transportation and material moving (19), construction trades (16), and handlers, equipment cleaners, helpers and laborers (14).
  - The most common events/exposures included transportation incidents (35), falls (22), and contact with objects and equipment (18).
  - A total of 2080 potential years of work life (the total number of years before age 65 of all the victims) was lost, an average of 22 years per fatality.
  - The percent of fatal injuries occurring by company size was: 1 - 10 employees, 40%, and over 100 employees, 26%.

## DATA SPECIFICATIONS

The following individuals are included:

- ◆ Private and public sector employees
- ◆ Self-employed persons
- ◆ Certain volunteers (firefighters, law enforcement officers, emergency medical service workers)
- ◆ Persons traveling on the job, but not commuting to or from work
- ◆ Institutionalized persons who are fatally injured while employed off the premises of their institutions

All fatal work-related injuries that occurred in New Jersey in 1999 were included in this report, including homicides, suicides, and motor vehicle accidents. Only deaths due to an injury are included; deaths due to an occupational illness are not included. *A death is considered work-related if the event leading to the fatal injury occurred while the employee was working, either on or off the employer's premises.* Fatal occupational injuries are classified according to the Bureau of Labor Statistics' protocol. The coding systems used are listed in footnotes to the tables in this report.

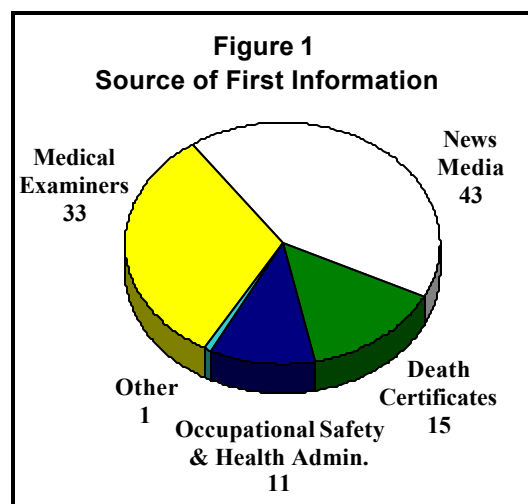
*An occupational injury is defined as a wound or other condition caused by external forces or caused by a specific event or incident or series of events within a single work day.* Work-related injuries listed as an underlying or contributory cause

on the death certificate or medical examiner's report are included. An example of this is a death that was caused by pneumonia after the worker was hospitalized with injuries that occurred at work.

## SOURCES OF INFORMATION

The work-relationship of each fatality is confirmed by at least two sources. Sources and documents used are newspaper articles, medical examiner reports, police reports, NJ Fatality Assessment and Control Evaluation (FACE) reports, and other state and federal agency reports. A follow-back questionnaire is sent to employers or other knowledgeable persons, when needed, to gather additional information.

Figure 1 shows that the news media, including newspaper articles, was the major source of initial information about the fatal injuries, followed by information from the county and state medical examiners.



## DEMOGRAPHIC CHARACTERISTICS

### Numbers

Table 1 shows the employer, employment status, gender, race and age of the 103 victims of fatal work-related injuries in New Jersey in 1999. Ninety-three percent of the victims worked for wages and salaries and 8% were government employees. Most of the victims were male (94%) and their ages ranged from 16 to 78 with 51% younger than 45 years of age.

**TABLE 1**

**Fatal Occupational Injuries by Selected Demographic Characteristics  
New Jersey, 1999**

CHARACTERISTIC	NUMBER	PERCENT
<b>TOTAL</b>	<b>103</b>	<b>100</b>
<b>Employer</b>		
Private	95	92
Government	8	8
<b>Employment Status</b>		
Wage and Salary Workers	96	93
Self-employed*	5	5
Others	2	2
<b>Gender</b>		
Men	97	94
Women	6	6
<b>Race</b>		
White	79	77
Black	16	16
Asian or Pacific Islander	4	4
Unknown	4	4
<b>Age</b>		
16 to 24 years	6	6
25 to 34 years	13	13
35 to 44 years	33	32
45 to 54 years	31	30
55 to 64 years	12	12
65 years and older	8	8

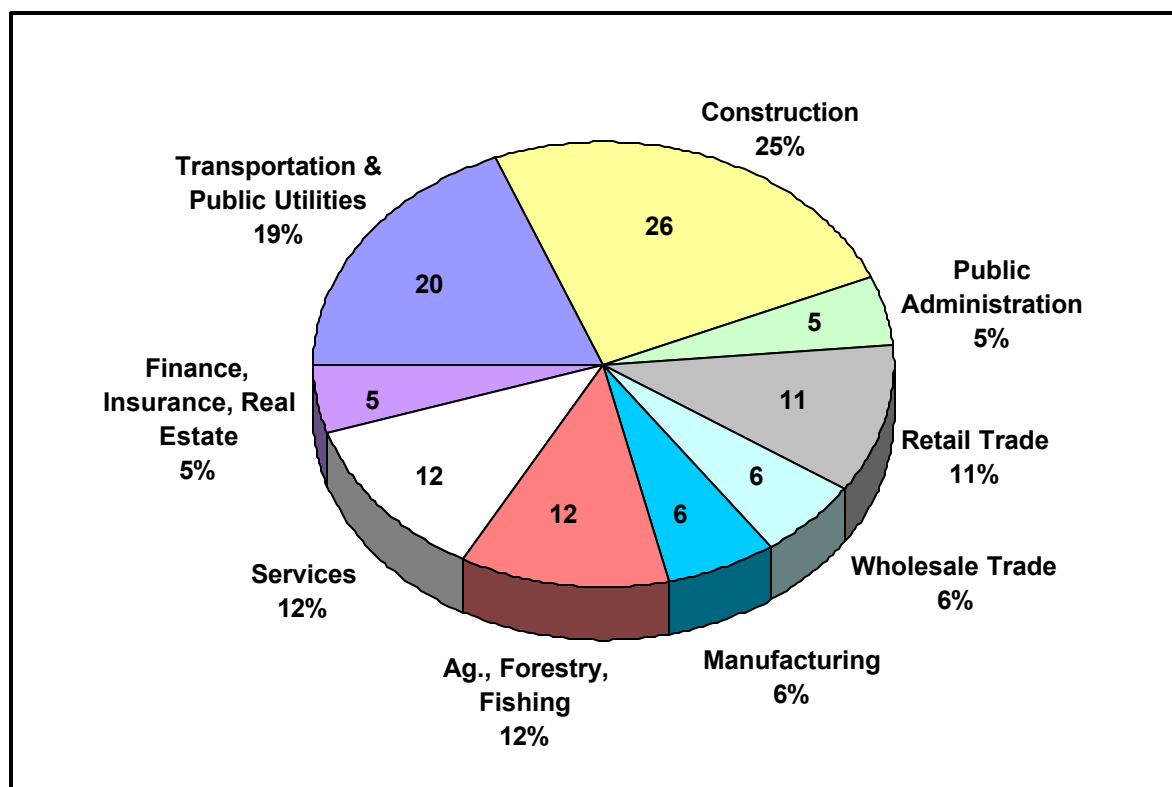
\*Owners of unincorporated businesses

Note: Percentages may not add to 100 due to rounding.

## INDUSTRY

The highest number of fatal injuries occurred in the industries of construction (26) and transportation and public utilities (20).

**FIGURE 2**  
**Fatal Occupational Injuries by Industry\***  
**New Jersey, 1999 (N=103)**



\*Based on the Standard Industrial Classification (SIC) Manual.

Includes workers employed in government with a SIC in other industries – 1 in transportation and public utilities, 1 in services, and 1 in construction.

Note: Percentages may not add to 100 due to rounding.

## OCCUPATION

**TABLE 2**  
**Fatal Occupational Injuries by Occupation**  
**New Jersey, 1999 (N=103)**

OCCUPATION*	NUMBER**	PERCENT
<b>Operators, Fabricators, and Laborers</b>	<b>37</b>	<b>36</b>
Transportation and material moving	19	
Handlers, equipment cleaners, helpers, & laborers	14	
Machine operators, assemblers, and inspectors	4	
<b>Precision Production, Craft, and Repair</b>	<b>23</b>	<b>22</b>
Construction trades	16	
Mechanics and repairers	6	
<b>Service Occupations</b>	<b>13</b>	<b>13</b>
Protective service occupations	8	
Service occupations, except protective and household	5	
<b>Farming, Forestry, and Fishing</b>	<b>12</b>	<b>12</b>
Fishers, including vessel captains and officers	8	
Other agriculture and related occupations	4	
<b>Managerial and Professional Specialty</b>	<b>10</b>	<b>10</b>
Executive, administrative, and managerial	6	
Professional Specialty	4	
<b>Technical, Sales, and Administrative Support</b>	<b>8</b>	<b>8</b>
Sales occupations	5	
<b>All Occupations</b>	<b>103</b>	<b>100</b>
<p>* Based on the 1990 Occupational Classification System developed by the Bureau of the Census.</p> <p>** Subcategories may not total major categories. Not all subcategories are shown.</p> <p>Note: Percentages may not add to 100 due to rounding.</p>		



## EVENT OR EXPOSURE

The event or exposure describes the manner in which the injury was produced or inflicted by the source of the injury.

**TABLE 3**  
**Fatal Occupational Injuries by Event or Exposure**  
**New Jersey, 1999 (N=103)**

<b>EVENT OR EXPOSURE*</b>	<b>NUMBER**</b>	<b>PERCENT</b>
<b>Transportation Incidents</b>	<b>35</b>	<b>34</b>
Highway accident	15	
Collision between vehicle and mobile equipment	8	
Vehicle struck stationary object on side of road	4	
Noncollision	3	
Worker struck by vehicle	8	
In roadway	4	
Water vehicle	9	
Sinking or capsized water vehicles	8	
<b>Falls</b>	<b>22</b>	<b>21</b>
Fall to lower level	21	
From a roof	7	
From a ladder	5	
From floor, dock, or ground level	3	
<b>Contact with Objects and Equipment</b>	<b>18</b>	<b>17</b>
Caught in or compressed by equipment or objects	9	
Struck by object	4	
Caught in or crushed in collapsing materials	4	
<b>Assaults and Violent Acts</b>	<b>17</b>	<b>17</b>
Homicides	15	
Shooting	10	
<b>Exposure to harmful substances or environments</b>	<b>9</b>	<b>8</b>
Contact with temperature extremes	3	
<b>Fires and Explosions</b>	<b>2</b>	<b>2</b>
<b>All Events or Exposures</b>	<b>103</b>	<b>100</b>
<p>* Based on the 1992 BLS Occupational Injury and Illness Classification Structures  ** Subcategories may not total major categories. Not all subcategories are shown.  Note: Percentages may not add to 100 due to rounding.</p>		

## EXTERNAL CAUSE OF INJURY

E-codes classify the environmental events, circumstances, and conditions as the causes of the injury, poisoning, or other adverse effects.

**TABLE 4**  
**Fatal Occupational Injuries by Cause**  
**New Jersey, 1999 (N=103)**

EXTERNAL CAUSE OF INJURY*	NUMBER**	PERCENT
<b>All Transportation Accidents</b>	<b>37</b>	<b>36</b>
<b>Motor Vehicle Traffic Accidents</b>	<b>19</b>	<b>18</b>
<i>Involving collision with motor vehicle</i>	<i>7</i>	
<i>Involving collision with pedestrian</i>	<i>4</i>	
<i>Involving collision with other than motor vehicle</i>	<i>4</i>	
<b>Motor Vehicle Nontraffic Accident</b>	<b>6</b>	<b>6</b>
<i>Involving collision with pedestrian</i>	<i>4</i>	
<b>Water Transport</b>	<b>10</b>	<b>10</b>
<b>Other Transport</b>	<b>2</b>	<b>2</b>
<b>Accidental Falls</b>	<b>20</b>	<b>19</b>
<i>Fall from ladder</i>	<i>5</i>	
<i>Fall from or out of building</i>	<i>7</i>	
<i>Fall into hole or other opening in surface</i>	<i>4</i>	
<b>Homicides &amp; Injuries Purposely Inflicted</b>	<b>15</b>	<b>15</b>
<b>Accidents Caused by Machinery</b>	<b>7</b>	<b>7</b>
<b>Struck by Falling Object</b>	<b>4</b>	<b>4</b>
<b>Caught in or Between Objects</b>	<b>4</b>	<b>4</b>
<b>Natural and Environmental Factors</b>	<b>3</b>	<b>3</b>
<b>Other</b>	<b>13</b>	<b>13</b>
<b>All External Causes of Injuries</b>	<b>103</b>	<b>100</b>

\* Based on the International Classification of Disease, 9<sup>th</sup> Edition, External Injury Codes (ICD-9 E-Codes).

\*\* Subcategories may not total major categories. Not all subcategories are shown.

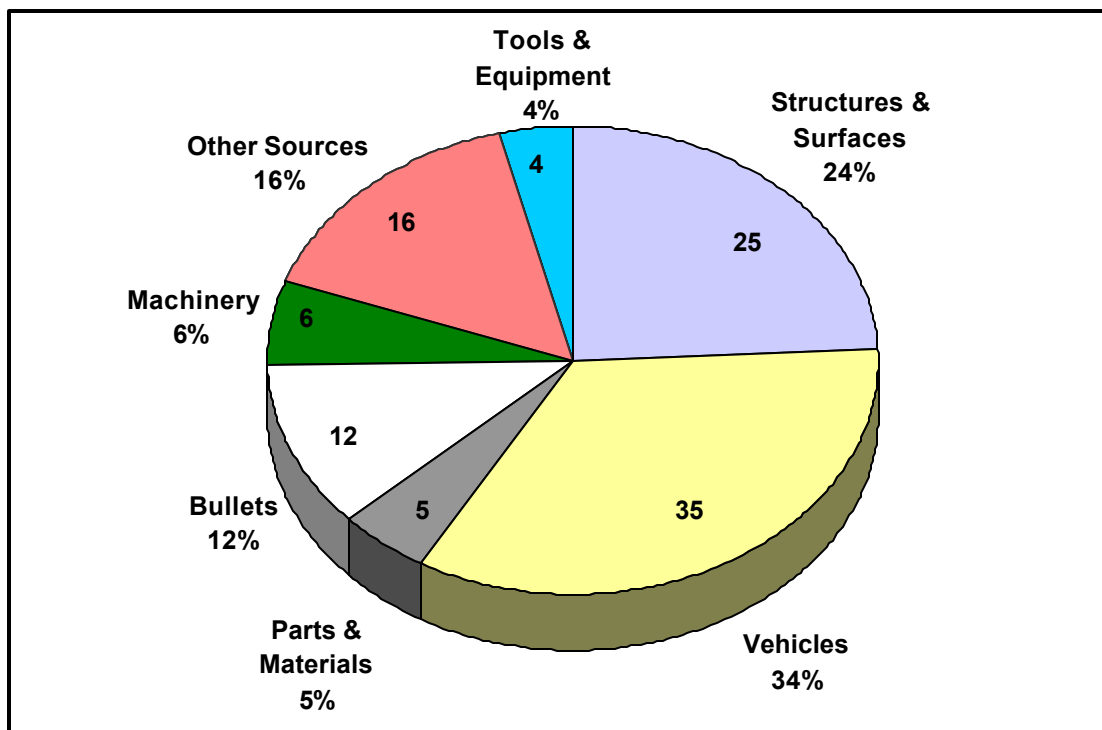
Note: Percentages may not add to 100 due to rounding.

## SOURCE OF INJURY

The sources (the objects, substances, exposures, or bodily motions that directly produced the injury) of the 103 fatal injuries are shown in figure 3.

Thirty-four percent of all work-related fatal injuries involved vehicles. The vehicles included 16 trucks (including 7 tractor-trailers), 5 autos, and 9 boats. Twenty-four percent of the sources were structures and surfaces (including 13 floors of buildings and 4 ground surfaces).

**Figure 3**  
**Fatal Occupational Injuries by Source of Injury\***  
**New Jersey, 1999 (N=103)**



\*Based on the 1992 BLS Occupational Injury and Illness Classification Structures.

Note: Percentages may not add to 100 due to rounding.

## WORKER ACTIVITY

Table 5 indicates the activity of the worker at the time of occurrence of the 103 fatal injuries. The most common activities were vehicular and transportation operations (33%), including driving or operating a vehicle, and constructing, repairing, and cleaning (28%).

**TABLE 5**  
**Fatal Occupational Injuries by Worker Activity**  
**New Jersey, 1999 (N=103)**

<b>WORKER'S ACTIVITY*</b>	<b>NUMBER**</b>	<b>PERCENT</b>
<b>Vehicular and Transportation Operations</b>	<b>34</b>	<b>33</b>
Driving or operating	16	
Truck	8	
Automobile	3	
Riding in or on	8	
Boat	8	
Boarding or alighting	3	
<b>Constructing, Repairing, Cleaning</b>	<b>29</b>	<b>28</b>
Construction, assembling, dismantling	11	
Repair, maintenance	7	
Inspecting or checking	6	
<b>Using, Operating Tools and Machinery</b>	<b>14</b>	<b>13</b>
Operating heavy equipment	4	
Operating, reading gauges, switches	4	
<b>Material Handling Operations</b>	<b>5</b>	<b>5</b>
<b>Physical Activities</b>	<b>5</b>	<b>5</b>
<b>Protective Service Activities</b>	<b>5</b>	<b>5</b>
<b>Other Activities</b>	<b>6</b>	<b>6</b>
Tending a retail establishment	4	
<b>Activity Unspecified or Unknown</b>	<b>5</b>	<b>5</b>
<b>All Activities</b>	<b>103</b>	<b>100</b>
<p>* Based on activity codes developed by the U.S. Department of Labor, Bureau of Labor Statistics.</p> <p>** Subcategories may not total major categories. Not all subcategories are shown.</p> <p>Note: Percentages may not add to 100 due to rounding.</p>		

## LOCATION

Table 6 shows the location of the 103 workers at the time of their injury. Most of the workers were working at industrial places (30%) or on streets or highways (29%). Nineteen workers were killed at construction sites: general construction (15), home construction (2), and road construction (2).

**TABLE 6**  
**Fatal Occupational Injuries by Location of the Worker**  
**New Jersey, 1999 (N=103)**

<b>WORKER'S LOCATION*</b>	<b>NUMBER**</b>	<b>PERCENT</b>
<b>Industrial Places and Premises</b>	<b>36</b>	<b>35</b>
Construction site	15	
Factory, plant	6	
Warehouse	5	
<b>Street or Highway</b>	<b>23</b>	<b>22</b>
Local road or street	15	
Limited access road	4	
Road construction	2	
<b>Public Building</b>	<b>16</b>	<b>16</b>
Convenience store or other store	6	
Restaurant	3	
<b>Home***</b>	<b>6</b>	<b>6</b>
Home construction	2	
<b>Other Places</b>	<b>15</b>	<b>15</b>
River or sea	11	
Parking lots	4	
<b>Others</b>	<b>7</b>	<b>7</b>
<b>All Locations</b>	<b>103</b>	<b>100</b>
<p>* Based on location codes developed by the U.S. Department of Labor, Bureau of Labor Statistics.</p> <p>** Subcategories may not total major categories. Not all subcategories are shown.</p> <p>*** Home construction has been coded under "Home" and not under "Industrial Places and Premises, Construction Sites," since 1996.</p> <p>Note: Percentages may not add to 100 due to rounding.</p>		

## YEARS 1991 – 1999

TABLE 7  
Fatal Occupational Injuries by External Cause of Injury (ICD-9 E-Codes)  
New Jersey 1991 – 1999

### Number of Fatal Injuries

ICD-9 E-Codes	1991	1992	1993	1994	1995	1996	1997	1998	1999
<b>Total</b>	<b>133<sup>1</sup></b>	<b>139<sup>2</sup></b>	<b>145<sup>3</sup></b>	<b>114</b>	<b>118</b>	<b>100<sup>4</sup></b>	<b>101</b>	<b>103</b>	<b>103</b>
<b>Transportation</b>	<b>34</b>	<b>43</b>	<b>55</b>	<b>33</b>	<b>36</b>	<b>40</b>	<b>28</b>	<b>38</b>	<b>37</b>
Motor vehicle traffic accidents	27	37	39	25	32	27	18	27	19
Motor vehicle nontraffic accidents	3	3	4	4	1	6	5	8	6
Water transport accidents	2	1	7	0	1	3	2	1	10
Railway accidents	2	0	2	0	0	3	1	2	1
Air transport accidents	0	2	3	4	2	1	2	0	1
<b>Homicide and Injuries Inflicted by Others</b>	<b>31</b>	<b>29</b>	<b>20</b>	<b>22</b>	<b>25</b>	<b>14<sup>5</sup></b>	<b>15</b>	<b>13</b>	<b>15</b>
<b>Accidental Falls</b>	<b>16</b>	<b>16</b>	<b>27</b>	<b>13</b>	<b>14</b>	<b>7</b>	<b>16</b>	<b>14</b>	<b>20</b>
<b>Accidents Caused by Electric Current</b>	<b>14</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>5</b>	<b>6</b>	<b>9</b>	<b>7</b>	<b>1</b>
<b>Accidents Caused by Machinery</b>	<b>12</b>	<b>17</b>	<b>10</b>	<b>15</b>	<b>9</b>	<b>8</b>	<b>8</b>	<b>12</b>	<b>7</b>
<b>Struck by Falling Object</b>	<b>4</b>	<b>0</b>	<b>8</b>	<b>1</b>	<b>7</b>	<b>5</b>	<b>7</b>	<b>6</b>	<b>4</b>

<sup>1</sup>Original Census 106; revised to 112. Twenty-one additional fatal injuries were added after the close of the year.

<sup>2</sup>Original Census 114; revised to 138. One additional fatal injury was added after the close of the year.

<sup>3</sup>Original Census 142; revised to 145.

<sup>4</sup>Original Census 99; revised to 100.

<sup>5</sup>Original count of homicides was 13. One additional homicide was added during revision.

Note: Only major categories of “causes of injury” are shown.